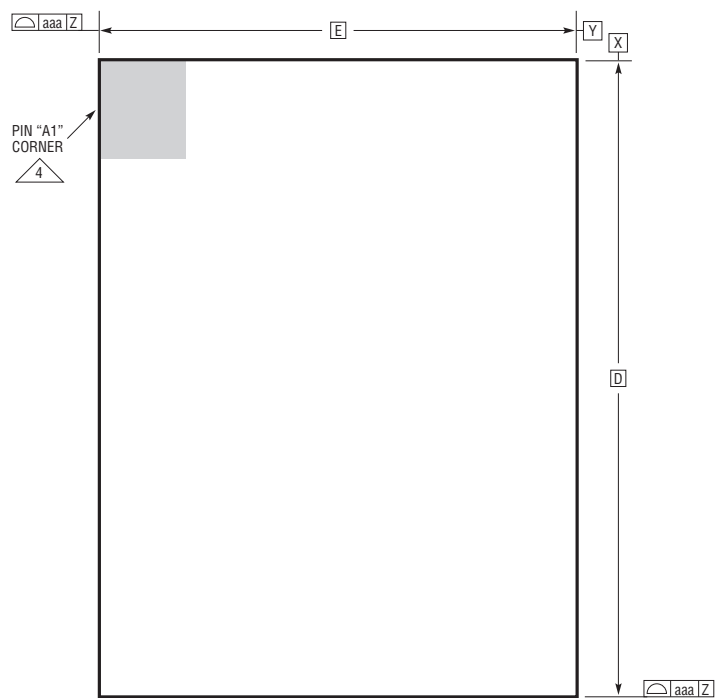
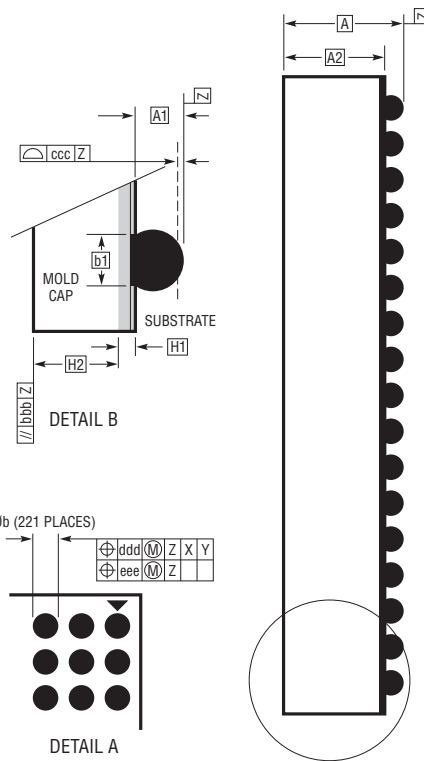


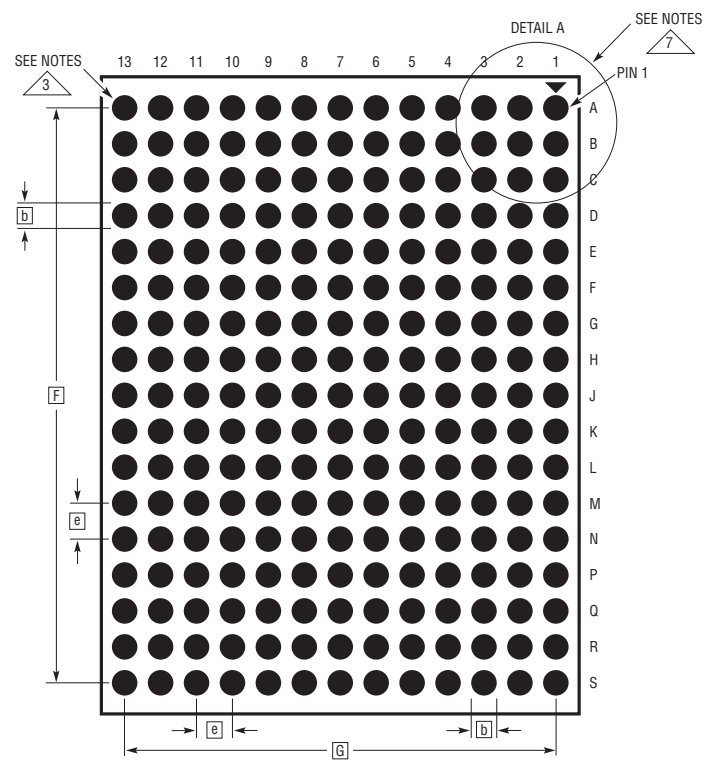
**BGA Package**  
**221-Lead (15mm × 11.25mm × 2.82mm)**  
 (Reference LTC DWG# 05-08-1886 Rev C)



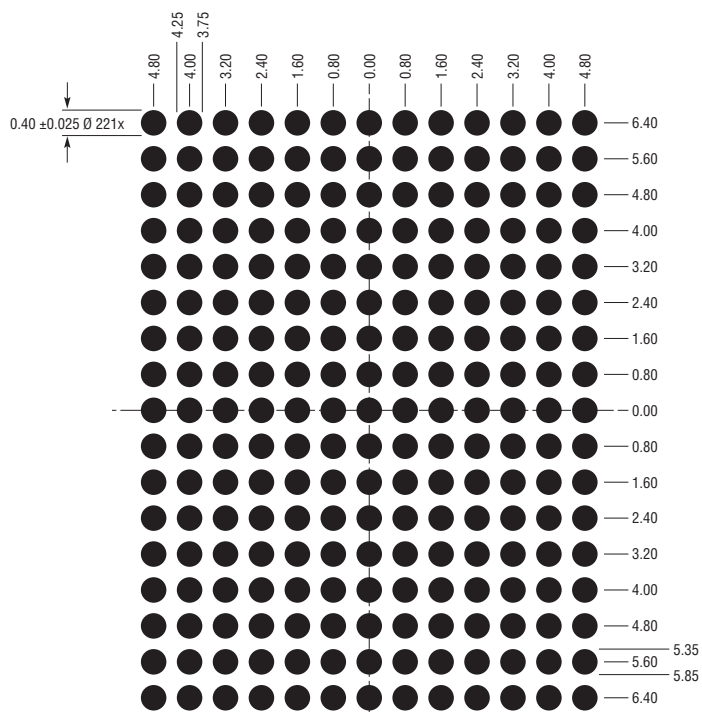
PACKAGE TOP VIEW



DETAIL B  
PACKAGE SIDE VIEW



PACKAGE BOTTOM VIEW



SUGGESTED PCB LAYOUT  
TOP VIEW

DIMENSIONS				
SYMBOL	MIN	NOM	MAX	NOTES
A	2.67	2.82	2.97	
A1	0.35	0.40	0.45	BALL HT
A2	2.32	2.42	2.52	
b	0.45	0.50	0.55	BALL DIMENSION
b1	0.37	0.40	0.43	PAD DIMENSION
D	15.0			
E	11.25			
e	0.80			
F	12.80			
G	9.60			
H1	0.37	0.42	0.47	SUBSTRATE THK
H2	1.95	2.00	2.05	MOLD CAP HT
aaa			0.15	
bbb			0.10	
ccc			0.12	
ddd			0.15	
eee			0.08	

TOTAL NUMBER OF BALLS: 221

NOTES:  
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

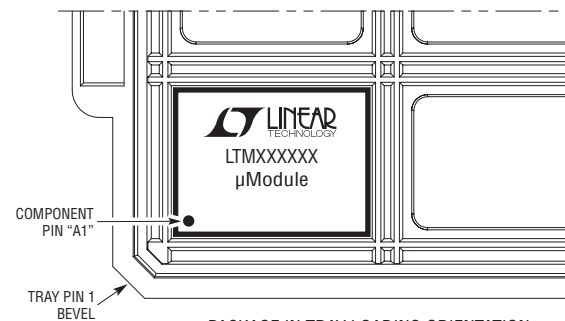
2. ALL DIMENSIONS ARE IN MILLIMETERS

3 BALL DESIGNATION PER JESD MS-028 AND JEP95

4 DETAILS OF PIN #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE PIN #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE

5. PRIMARY DATUM -Z- IS SEATING PLANE

6 PACKAGE ROW AND COLUMN LABELING MAY VARY AMONG  $\mu$ Module PRODUCTS. REVIEW EACH PACKAGE LAYOUT CAREFULLY



PACKAGE IN TRAY LOADING ORIENTATION